

CLAIMS

What is claimed is:

1. A method of starting a multiple PDA OS (Operating System) through a menu for starting an OS in a portable computer installed with multiple OS's including at least one PDA

5 OS and a basic OS, which comprises the steps of:

(1) modifying BIOS contents of the portable computer to (a) skip some hardware device diagnosis steps to accelerate the power on speed, and (b) detect the multiple OS's pre-loaded in the portable computer;

10 (2) listing the detected multiple OS's in a menu on an output device of the portable computer for a user to select;

(3) obtaining the selection information about an OS selected by the user from the menu; and

(4) starting the OS selected by the user.

15 2. The method of claim 1, wherein the step of modifying BIOS contents further includes the step of establishing a quick hardware diagnosis procedure and an OS detecting procedure.

3. The method of claim 2, wherein the quick hardware diagnosis procedure only performs hardware diagnosis for input devices that support menu operations so as to accelerate the power on speed of the portable computer.

20 4. The method of claim 3, wherein each of the input devices is selected from the group consisting of a mouse, a keyboard, and a touch-control monitor.

5. The method of claim 2, wherein the OS detecting procedure obtains information of all the OS's pre-loaded in the portable computer by reading OS partition information stored

in the MBR (Master Boot Record).

6. The method of claim 1, wherein the output device is selected from the group consisting a monitor and a touch-control monitor.

7. A method of starting a multiple PDA OS through a menu for starting an OS in a portable computer installed with multiple OS's including at least one PDA OS and a basic OS, which comprises the steps of:

(1) modifying BIOS contents of the portable computer to (a) skip some hardware device diagnosis steps to accelerate the power on speed, and (b) detect the multiple OS's pre-loaded in the portable computer;

(2) providing PDA hot keys, each of which directly starts a unique PDA OS after power is turned on;

(3) listing the detected multiple OS's in a menu on an output device of the portable computer for a user to select;

(4) obtaining the selection information about an OS selected by the user from the menu; and

(5) starting the OS selected by the user.

8. The method of claim 7, wherein the step of modifying BIOS contents further includes the step of establishing a quick hardware diagnosis procedure and an OS detecting procedure.

9. The method of claim 8, wherein the quick hardware diagnosis procedure only performs hardware diagnosis for input devices that support menu operations so as to accelerate the power on speed of the portable computer.

10. The method of claim 9, wherein each of the input devices is selected from the group

consisting of a mouse, a keyboard, and a touch-control monitor.

11. The method of claim 8, wherein the OS detecting procedure obtains information of all the OS's pre-loaded in the portable computer by reading OS partition information stored in the MBR (Master Boot Record).

5 12. The method of claim 7, wherein the number of PDA hot keys is determined by the number of OS's installed in the portable computer.

13. The method of claim 7, wherein the correspondence between the PDA hot keys and the OS's is defined by a hot key table in a BIOS chip.

14. The method of claim 7, before the step (3), further comprising the steps of:

10 (3.1) determining whether there are multiple OS partitions and continuing to the next step if there are; otherwise, starting a booting procedure of the basic OS;

(3.2) detecting a PDA OS in the multiple OS partitions; and

(3.3) detecting if any of the PDA hot keys is pressed and starting the PDA OS corresponding to the PDA hot key; otherwise, continuing to the step (3).

15 15. The method of claim 14, wherein the booting procedure of the basic OS further includes the step of running a POST (Power On Self Test) procedure after power is turned on.